

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

1 1. A method of inter process communication (IPC) between processors in a
2 network processing environment, comprising the steps of:

3 a) providing software enabled functions that open and close inter
4 process communication paths for transmitting and receiving of inter process
5 communication frames;

6 b) providing software enabled functions that allow said inter process
7 communication frames to be transmitted to one or several processors in said
8 network processing environment; and

9 c) upon calling an open software transmit/receive IPC path function,
10 selecting by software either data or control path in said network processing
11 environment to transmit or receive said inter process communication frames.

1 2. The method of inter process communication (IPC) between processors in a
2 network processing environment recited in claim 1, wherein the software
3 enabled functions that open and close inter process communication paths for
4 transmitting and receiving of inter process communication frames perform the
5 steps of:

6 determining if an IPC path function is a send or receive function; and
7 if a receive function, calling a receive IPC function.

1 3. The method of inter process communication (IPC) between processors in a
2 network processing environment recited in claim 2, wherein the software
3 enabled functions that allow said inter process communication frames to be

4 transmitted to one or several processors in said network processing
5 environment comprise the steps of:
6 determining if an IPC frame to be sent is to be unicast or multicast;
7 if multicast, calling a multicast transmit function; but
8 if unicast, calling a unicast transmit function.

1 4. The method of inter process communication (IPC) between processors in a
2 network processing environment recited in claim 3, wherein after calling one
3 of said receive IPC, multicast transmit or unicast transmit functions, further
4 performing the step of closing a software transmit/receive IPC path function.

1 5. An inter process communication (IPC) system providing communication
2 between processors in a network processing environment, comprising:
3 a) software enabled functions that open and close inter process
4 communication paths for transmitting and receiving of inter process
5 communication frames;

6 b) software enabled functions that allow said inter process
7 communication frames to be transmitted to one or several processors in said
8 network processing environment; and

9 c) means for selecting by software either data or control path in said
10 network processing environment to transmit or receive said inter process
11 communication frames in response to calling an open software
12 transmit/receive IPC path function.

1 6. The inter process communication (IPC) system providing communication
2 between processors in a network processing environment recited in claim 5,
3 wherein the software enabled functions that open and close inter process
4 communication paths for transmitting and receiving of inter process

5 communication frames comprise:

6 means for determining if an IPC path function is a send or receive

7 function; and

8 if a receive function, means for calling a receive IPC function.

1 7. The inter process communication (IPC) system providing communication

2 between processors in a network processing environment recited in claim 6,

3 wherein the software enabled functions that allow said inter process

4 communication frames to be transmitted to one or several processors in said

5 network processing environment comprise:

6 means for determining if an IPC frame to be sent is to be unicast or

7 multicast;

8 if multicast, means for calling a multicast transmit function; but

9 if unicast, means for calling a unicast transmit function.

1 8. The inter process communication (IPC) system providing communication

2 between processors in a network processing environment recited in claim 7,

3 further comprising means closing a software transmit/receive IPC path

4 function after one of said receive IPC, multicast transmit or unicast transmit

5 functions have been called.

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